Plain Language Summary for New Source Review (NSR) Initial Application for Air New Source Review Permit Number 168854

The following summary is provided for this pending air permit application being reviewed by the Texas Commission on Environmental Quality as required by 30 Texas Administrative Code Chapter 39. The information provided in this summary may change during the technical review of the application and are not federal enforceable representations of the permit application.

Oxy USA Inc. (CN604677401) has submitted an application for initial permit number *168854*. The proposed *direct air capture facility* (RN111488896) will capture *an average of 500,000 metric tons per year (MTPY) of carbon dioxide (CO_2) from the atmosphere* at *the site which can be accessed from the intersection of TX-302 and TX-338 head northwest on TX-302 drive 23.6 miles and turn left on South Wheeler Road drive south 8 miles on South Wheeler Road*, *Odessa*, *Ector* County.

This permit will authorize a facility to capture CO_2 directly from the air. The facilty will deploy innovative technology that captures and permanently removes CO_2 directly from the atmosphere. The equipment to be installed includes air contactors, a calciner and dryer, pellet grinders, a CO_2 compression, dehydration and purification system, storage tanks, and emergency generators as well as storage silos, bins and material handling systems. *Oxy USA Inc.* has listed in the application the pollutants and amounts that are proposed to be emitted from the equipment. Below is the total amount for each pollutant that is proposed to be emitted each year for all the equipment.

Pollutant	**Proposed Emissions (tons per year)**
Carbon Monoxide (CO)	33.45
Nitrogen Oxides (NO_X)	20.49
Particulate Matter (PM)	96.70
PM with a diameter of 10 microns or less (PM_{10})	77.65
PM with a diameter of 2.5 microns or less ($PM_{2.5}$)	65.16
Sulfur Dioxide (SO_2)	0.10
Ozone (as VOC)	3.42
Ozone (as NO_X)	20.49
Hydrogen Sulfide (H_2S)	3.61
Hydrogen Chloride (HCl)	0.031

The emissions from the facility's equipment will be controlled. Emissions from air contactors will be controlled with water droplets eliminators. Enclosed conveyors, particulate scrubbers, filters and baghouses on material receiving and handling equipment will trap and control the particulate emissions in the gas / vapor streams. The plant road which sees regular truck traffic will be paved to avoid dust generation. Pure oxygen will be used in the combustion process to promote complete combustion and reduce CO and NOx emissions. Low-sulfur clean pipeline quality natural gas will be used to minimize emission of SO_2 from combustion. Acid gas emissions will be absorbed and removed by contact with liquid substances. VOC emissions from the natural gas combustion associated with calciner start-up are low.